

SERVED: November 10, 1999

NTSB Order No. EA-4799

UNITED STATES OF AMERICA  
**NATIONAL TRANSPORTATION SAFETY BOARD**  
WASHINGTON, D.C.

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD  
at its office in Washington, D.C.  
on the 29th day of October, 1999

_____	)	
JANE F. GARVEY,	)	
Administrator,	)	
Federal Aviation Administration,	)	
	)	
Complainant,	)	
	)	Docket SE-15174
v.	)	
	)	
BIRGITTE HOLMGAARD,	)	
	)	
Respondent.	)	
_____	)	

**OPINION AND ORDER**

Both the respondent and the Administrator have appealed from the oral initial decision of Administrative Law Judge William A. Pope, issued on August 21, 1998, at the conclusion of a two-day evidentiary hearing.<sup>1</sup> By that decision, the law judge affirmed the Administrator's order which alleged that respondent had begun a flight with insufficient fuel, in violation of sections 91.151(a)(1) and 91.13(a) of the Federal Aviation Regulations (FAR), 14 CFR Part 91. The law judge also reduced the sanction

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<sup>1</sup>An excerpt from the hearing transcript containing the initial decision is attached.

ordered, from a 90-day to a 30-day suspension of respondent's airline transport pilot (ATP) certificate. Respondent asserts on appeal that the law judge's decision should be reversed because the Administrator failed to sustain her burden of proof. The Administrator appeals the law judge's sanction modification.<sup>2</sup> We affirm the Administrator's order, as modified by the law judge.

The Administrator's order, which was filed as the complaint in this matter, alleges, in pertinent part, as follows:

2. On or about March 15, 1997, you operated civil aircraft N1365B, a Cessna 180H, as pilot in command, on a flight which ended with a landing at Crestview Airport at or approximately 4:00 p.m. local time.

3. a. The above flight was begun under visual flight rules (VFR) conditions.

b. At the time the above flight was begun, considering wind and forecast weather conditions, there was not enough fuel to fly to the first point of intended landing and, assuming normal cruising speed, to fly after that for at least 30 minutes.

4. a. At the time of departure of the above flight, N1365B had a fuel leak as a result of a faulty fuel strainer plunger.

b. As a result, at the time of departure of the above flight, N1365B was not in an airworthy condition.

c. A reasonably prudent pilot in command would have discovered the faulty fuel strainer during preflight inspection.

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<sup>2</sup>The Administrator also asks the Board to determine whether the sanction should apply against any pilot certificates held by respondent, or to her airline transport pilot certificate only. We think this is a non-issue. The law judge stated that he intended his order to "track" the language of the complaint. The complaint was ordered against "any and all pilot certificates held by" respondent, including her ATP certificate. In our view, any suspension ordered is to be applied against any airman certificate held by respondent, including her ATP, commercial, and private pilot certificates.

As a result, you violated the following sections of the Federal Aviation Regulations:

1. Section 91.7(a), in that you operated a civil aircraft when it was not in an airworthy condition.

2. Section 91.13(a), in that you operated an aircraft in a careless or reckless manner so as to endanger the life or property of another.

3. Section 91.151(a)(1), in that you began a flight in an airplane under VFR conditions during the day without (considering wind and forecast weather conditions) there being enough fuel to fly to the first point of intended landing and, assuming normal cruising speed, to fly after that for at least 30 minutes.<sup>3</sup>

Respondent is part owner and pilot for a skydiving operation. On March 15, 1997, she was the pilot in command of a Cessna 180 aircraft, N1365B, on four flights carrying parachutists for hire from the Crestview Airport in Crestview, Florida, to a nearby drop zone. The first three flights were unremarkable. When N1365B landed after the fourth flight, however, it was completely out of fuel and had to be towed by automobile to the apron in front of the building used by respondent's business. FAA Inspector Harvey Schwab was at the airport inspecting an operator, and happened to observe the aircraft being towed in.

According to Inspector Schwab, he approached respondent and asked her if she had a problem. She replied "yes," and stated that an oil pressure light had come on during flight, so she had

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<sup>3</sup>The Administrator pled a violation of FAR § 91.7(a) in the alternative, to address respondent's affirmative defense that the fuel exhaustion was due to a faulty fuel strainer. The law judge rejected this affirmative defense, *infra*, and dismissed the FAR 91.7(a) charge.

shut down the engine and landed. Inspector Schwab looked at the aircraft, but he saw no oil residue. He suggested to respondent that perhaps there could have been fuel starvation, but she insisted that fuel exhaustion was not possible. They got a ladder, and respondent dipped the tanks. Respondent claimed she found fuel, but when Inspector Schwab dipped the tanks himself, he found the right tank completely dry and only a few drops of fuel in the left tank. Nor did he find any fuel residue on the aircraft.

According to Inspector Schwab, respondent claimed she had conducted a preflight inspection of the aircraft, and she claimed that she filled each wing with fifteen gallons of fuel. And, he testified, she told him that she had flown four flights in two hours. Inspector Schwab testified that respondent became upset by his suggestion of fuel exhaustion, and she even suggested to him that fuel may have been stolen from the aircraft. Inspector Schwab asked no further questions of respondent. He believed respondent was lying to him, and he initiated an investigation.

Respondent denied telling Inspector Schwab that she operated the aircraft for two hours. She also denied telling him that fifteen gallons of fuel had been put in each tank of the aircraft. Finally, she testified, she did not suggest that fuel had been stolen from the aircraft; he did. She does admit she was surprised when the tanks were found dry, but that is because she believed she had sufficient fuel.

Respondent testified that she saw her partner, Bob Holler, fill the right tank to thirty gallons of fuel on March 15<sup>th</sup>. She also testified that she saw him dip the tanks first, and there already was eight to ten gallons in the left tank. Holler testified that he indeed fueled the aircraft that day. He put thirty gallons in the tank, which brought it *about a half inch above the three-load mark* on the dip stick, explaining that he measured the fuel quantity using a dip stick made by respondent that has marks for gallons and loads.<sup>4</sup> Respondent entered the fuel amount in her log book.

According to the testimony and the aircraft's owner's manual, the average fuel consumption for the subject aircraft at cruise speed is fourteen or fifteen gallons per hour.<sup>5</sup> Respondent testified that the typical flight is made from an altitude of 10,500 feet and takes .5 hours on the Hobbs meter, and, based on her experience with this aircraft, which she owns, it takes about eight or nine gallons of fuel to fly a plane load of parachutists to 10,500 feet. In other words, according to her calculations, the aircraft burns eighteen gallons per hour when climbing. She calculates that she "would have used no more than 27 gallons [on the day in question], and that's on the high side." (TR-213).<sup>6</sup>

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<sup>4</sup>Respondent explained that the three-load mark on the dip stick was based on 1.5 hours of operation at 10,500 feet.

<sup>5</sup>There is no data for climb performance fuel consumption rates in the owner's manual.

<sup>6</sup>Respondent explained at length how she arrived at these

Respondent explained that because of a low ceiling, the first three flights were made at lower altitudes and took less time than usual. Flight one was to an altitude of 4,000 feet and took .2 hours; flight two was to 7,000 feet and took .4 hours; flight three was to 5,500 feet and took .3 hours. Flight four was to 10,500 feet and took .5 hours because, by then, the weather had cleared. Thus, respondent testified, the flights took only 1.4 hours. Respondent testified that she did do a quick check and dipped the tanks between the flights on the day in question. (TR-217). She was able to take the fourth flight up without re-fueling because she believed she had burned less fuel than normal on the first three flights.<sup>7</sup>

Respondent testified that she logs everything related to her aircraft in an auto expense book. She gave a copy of that log to Inspector Schwab, and also entered a copy into evidence. (Exhibit R-5). The times and altitudes, as well as the Hobbs meter readings, are recorded in respondent's log book and are consistent with her testimony. The Hobbs meter reading for the preceding day, March 14<sup>th</sup>, is 186.8. The Hobbs meter reading is

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(..continued)

estimates by measuring the amount of fuel before and after various types of operations, and how she calibrated her dip stick based on these figures. Respondent admitted that it is difficult to measure when there is less than 10 gallons of fuel in one of the tanks because of the way in which the aircraft sits when it is on the ground.

<sup>7</sup>Respondent's partner was on all four flights that day. He testified that respondent always checked the fuel amount with a dip stick and performed a walk-around inspection of the aircraft between each flight, while she waited for the parachutists to repack their chutes. He never saw any leaks that day.

187.0 at the start of March 15<sup>th</sup>, respondent explained, because of the short flight from her private airstrip to the airport prior to the flights on March 15<sup>th</sup>. At the end of March 15<sup>th</sup>, the Hobbs meter reading is 188.4 hours. The exhibit also indicates that 30 gallons of fuel were put into the aircraft on March 15<sup>th</sup>.

The aircraft's manual indicates that two and one-half gallons of fuel in each wing is unusable. Subtracting five unusable gallons from thirty, Inspector Schwab determined that respondent's departure with twenty-five gallons of usable fuel was insufficient. Even if she had put thirty gallons in and used only twenty-eight gallons, he opined, that would leave only two gallons in reserve and not the seven gallons needed for a thirty-minute reserve, as required by the FAR.

On March 16<sup>th</sup>, the day after this incident, respondent arranged for a mechanic to examine the aircraft, which had not been moved since it had been towed in on the previous day. As soon as they fueled the aircraft, respondent testified, she saw a constant stream of fuel flow from the bottom of the aircraft. According to respondent the mechanic said to her, "there's your answer right there." (TR-246).<sup>8</sup> The mechanic replaced the fuel strainer plunger and logged it in the aircraft's maintenance records. (Exhibit R-3). Respondent gave Inspector Schwab a copy

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<sup>8</sup>Respondent's partner also testified that he saw McDuffie fuel the plane, saw the leak, and saw McDuffie put a bucket under the leak as he replaced the part. The aircraft was "up and running" in an hour. (TR-148). These observations are corroborated by testimony of three of the parachutists.

of the maintenance records.

Inspector Schwab spoke with the mechanic, Curtis McDuffie, who he acknowledges as an independent mechanic. McDuffie told him that the fuel strainer plunger was defective, and he provided Schwab with a written statement, placing his FAA Aircraft and Maintenance (A&P) certificate number on the statement. (Exhibit R-1). Since the defective part was never produced, Inspector Schwab could not confirm that the defect was capable of occurring spontaneously during flight, or if it was capable of causing a significant fuel loss. In Inspector Schwab's opinion, if the strainer had been leaking in flight, there should have been fuel stains on the aircraft.

FAA Inspector Thomas Miller, who was qualified by the law judge as an expert on Cessna aircraft, and who holds an A&P certificate, agreed with Inspector Schwab that, if the aircraft had leaked fuel on the fourth flight, there should have been stains on the fuselage. Respondent's expert witness, Ray Moore, also an A&P, and a retired FAA inspector, disagreed. In his opinion, the leaking fuel, flowing at the rate of a gallon a minute, could have also gone into the air stream and there would be no stains.

The law judge affirmed the Administrator's allegation of fuel exhaustion. Relying on respondent's testimony that she used "no more" than twenty-seven gallons of fuel, he concluded that she was careless because she could not accurately say how much fuel was in the aircraft before it was fueled, and therefore she



could not rely on that amount of fuel as her reserve. Thus, the law judge found, even if respondent started the day with thirty gallons of fuel, that amount was insufficient. When respondent decided to take a fourth load of parachutists up because the weather had cleared, she should have, as a reasonable and prudent pilot, refueled the aircraft to insure she had sufficient reserves. Instead, the law judge implicitly found that respondent only mentally calculated that she would have sufficient reserves, based on the fact that her first three flights were to lower altitudes and of shorter duration than the typical flight on which she based her calculations. However, as the Administrator points out in his reply brief, respondent had no empirical data to support her belief that the first three flights burned less fuel. In fact, she admitted that she may have burned as much as twenty-seven gallons, thus leaving less than the seven gallons needed for reserve after accounting for unusable fuel amounts. The law judge's finding of fuel starvation is further supported by his credibility determination against respondent with regard to her conversation with Inspector Schwab. We adopt the law judge's findings as our own.

Respondent asserts, nonetheless, that she should have prevailed on her affirmative defense, arguing that she established that there was some reasonable explanation for the fuel insufficiency other than her carelessness. We disagree. Her proof on this matter did not survive the law judge's determination that it was inherently incredible that a

significant loss of fuel over so short a period of time would not have left stains on the aircraft's fuselage. We have been offered no valid reason to disturb the law judge's finding as to the affirmative defense.

Turning to the issue of sanction, the Administrator asserts that while fuel exhaustion cases typically bring a sanction of a 30-day suspension, Board precedent dictates a 90-day suspension here because of respondent's violation history. We disagree. The case relied on by the Administrator, Administrator v. McAllister, 1 NTSB 1221 (1971), is inapposite. The law judge properly distinguished the precedent relied on by the Administrator, finding that neither of respondent's violations established that she has a disdain for regulations. Implicit in this determination was the law judge's ability to see and hear respondent. The law judge did not exceed his authority by modifying the sanction.

**ACCORDINGLY, IT IS ORDERED THAT:**

1. Both the Administrator's and the respondent's appeals are denied;
2. The Administrator's order, as modified by the law judge in his initial decision, and the initial decision are affirmed; and
3. The 30-day suspension of respondent's airman certificates, including her ATP certificate, shall commence 30 days after the service date indicated on this opinion and order.<sup>9</sup>

HALL, Chairman, FRANCIS, Vice Chairman, HAMMERSCHMIDT, GOGLIA, and BLACK, Members of the Board, concurred in the above opinion and order.

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<sup>9</sup>For purposes of this order, respondent must physically surrender her certificates to a representative of the Federal Aviation Administration pursuant to FAR § 61.19(f).